U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
John Day Vapor Response - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: **POLREP #3**
Progress
John Day Vapor Response

John Day, OR
Latitude: 44.4118110 Longitude: -118.9529053

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From: Michael Boykin, On Scene Coordinator
Date: 6/3/2015
Reporting Period: May 26 - June 2, 2015

1. Introduction

1.1 Background

Site Number:	10PB	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	Removal Assessment
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	5/21/2015	**Start Date:**	5/20/2015
Demob Date:		**Completion Date:**	
CERCLIS ID:	ORN001001391	**RCRIS ID:**	
ERNS No.:		**State Notification:**	ODEQ
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

The site consists of an approximately 1/2 mile long and 2-block wide area of residences, a church, and some light commercial businesses, located on the south side of the city of John Day. The site runs parallel to, and along S. Canyon Blvd (U.S. Hwy 395) and Canyon Creek. Residences include single and multi-family homes and rental properties.

Canyon Creek is reported to be a migratory pathway for salmon and steelhead trout. Further, Canyon Creek flows into the John Day River within approximately 3/4 mile of the site. The John Day River is a significant river in eastern Oregon noted for its steelhead trout and salmon runs, Bull trout habitat, smallmouth bass fishery, and recreational activities. It is also used for irrigation by farms and ranches along its length.

1.1.2.1 Location

John Day, Grant County, Oregon.

1.1.2.2 Description of Threat

Volatile Organic Compounds (VOCs), including hexane, benzene, ethylbenzene, xylenes, 2-methylbutane, pentane, butane, hexane, cyclohexane, 3- and 2-methylhexane, heptane, isobutene, and methylcyclohexane have been detected in a vapors that are believed to be releasing from an unknown groundwater plume into at least 20 homes, some commercial properties, and into the environment.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In mid-May 2015, the Oregon Department of Environmental Quality (DEQ) requested assistance from EPA in response to numerous reports of unusual odors in and around homes and commercial buildings along South Canyon Boulevard in John Day, Oregon. The problem initially began in February and early March, 2015, at the USDA and Grant County Soil Conservation District building, where employees noticed strong odors and health effects such as headaches, irritated eyes and sore throats. The District then hired a consultant to investigate the odors and their source in the building. The consultant's investigation revealed unusually high levels of volatile organic compounds (VOCs) in the building and crawl space. Similar complaints from residents in the same area began surfacing in early May. The City of John Day began investigating the problem, worked with a consultant to test indoor air at a home and the local library, and then contacted the DEQ for assistance. Similar results (elevated VOCs) were found in both locations, and that more extensive air monitoring for vapors may be needed. Specific VOCs of concern include chemicals such as hexane, benzene, ethylbenzene, and xylenes.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The EPA, START contractor, and DEQ along with City of John Day personnel, are conducting air monitoring in residences, schools, city/county facilities/utilities ,and local businesses to determine the presence of Total Volatile Organic Compounds (TVOCs) related to odors occurring in this neighborhood of the City of John Day. The EPA/START have collected air samples in several residences. Mitigation of high TVOCs in residences is ongoing.

Source investigation activities include: direct-push probe drill rig (Drill Rig) borehole installation and groundwater and soil samples collection; irrigation wells assessment and groundwater sampling, SPCC inspections of nearby fuel facilities; and RCRA inspections of nearby regulated facilities.

2.1.2 Response Actions

May 26 - June 2, 2015

EPA/START continued air monitoring of residences and businesses in the impacted area. A total of 70+ residences and businesses have been screened to date. Any residence or business that had measurable levels of TVOCs exceeding the interim screening level of 5,000 parts per billion (ppb) were advised of precautionary mitigating steps to take to reduce vapors in the living and working spaces. As outlined in

EPA Fact Sheet #2, the public was advised to take the following precautionary measures or mitigation steps to reduce exposures to vapors: 1. Ventilate, open windows and doors and position fans to create cross draft; 2. Seal cracks/holes in basement walls/floors with foam; 3. Put down vapor barrier on soil surfaces in crawl spaces; 4. Limit time in room with odors or move into another room; 5. Arrange to spend night at neighbors/family homes outside of the impacted area.

Additional mitigation steps taken by EPA/START include positioning home personal fans and fire department-provided fans to promote a cross draft in high TVOCs residences and switching the direction of flow to create a positive or negative pressure situation while monitoring TVOCs levels.

A total of 3 summa canister and 11 sorbent tube air samples were collected for VOCs, SVOCs across 8 residences on May 26, 2015. Samples were submitted to the analytical lab for quick turnaround analyses. Preliminary analytical results were received and indicate a positive correlation with air monitoring TVOCs measured by screening instruments. The preliminary results were shared with Grant County Health Department, Oregon Health Authority, and DEQ and EPA Toxicologists for review and health assessment.

The START Data Manager has established and is maintaining a database of monitoring and sampling data in addition to a Field Viewer that depicts the data for field planning and operations use. The EPA set up a process to review air monitoring data from residences, on a daily basis, to trigger a follow-up visit to check if air quality has changed. Follow-up air monitoring of residences with TVOCs measurements that exceeded the screening level are indicating that short-term measures have reduced TVOC levels significantly.

For source investigation the EPA/START mobilized a Drill Rig on May 27 and the team started drilling probe holes on May 28th. Soil and groundwater samples were collected, depending on recovery of media in the samplers, and submitted to an analytical laboratory. As of June 2, 2015, a total of 14 probe holes have been installed. Drill rig rods and samplers were left in place at 4 probe holes as temporary monitoring points for periodic sampling. Additional probe hole locations have been identified by an EPA Hydrogeologist, the START Drill Rig team, and the DEQ Hydrogeologist/Project Manager for installation this upcoming week in an effort to delineate the extent of contamination, identify migration pathways and potential sources/RPs.

The START have been identifying and assessing access to private irrigation wells in the area. Four irrigation wells were identified, assessed, and groundwater samples collected for submittal to the analytical laboratory
on June 2. The START will continue the search for additional irrigation well sampling points to supplement the groundwater sampling efforts.

An EPA Environmental Response Team (ERT) Hydrogeologist was deployed and arrived onsite, May 31, 2015 to assist Unified Command in evaluating short- and long-term options for mitigation of the contamination plume. The ERT Hydrogeologist is accompanying the drill rig team during source investigation/extent of contamination activities in an effort to determine the conceptual site model and update as data is received.

EPA/START and DEQ have been coordinating with City of John Day Public Works (JDPW) personnel to conduct air monitoring of 27 manholes in city sewer lines where high TVOCs and elevated LEL readings have been found. Also, JDPW conducted a sewer plug test in order to allow for collection of a water sample and test for possible groundwater and vapor infiltration that may be causing high TVOCs and LELs. In addition, JDPW personnel utilized a sewer camera to assess sewer lines in the impacted area to identify areas of the line that may be compromised thereby allowing contaminated groundwater or vapor infiltration.

EPA Community Involvement Coordinator (CIC) and Public Affairs specialist Judy Smith was on-site until May 31st, engaging and coordinating with the community and affected individuals/families, creating fact sheets and flyers, conducting public outreach with the local radio station and local newspaper, and coordinating a Community Meeting. OSC Brooks Stanfield and CIC Judy Smith provided a briefing and answered questions at a John Day City Council meeting on Tuesday, May 26, 2015.

CIC Kay Morrison arrived onsite, May 30, overlapping with Judy Smith and assisting in preparations for the community meeting. The community meeting occurred on May 30, from 2-4 pm and approximately 20

community members were in attendance.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Although several potential commercial businesses and sources have been identified in the immediate area, no specific PRPs have been identified. Investigation activities into source and PRPs continue.

2.2 Planning Section

2.2.1 Anticipated Activities

EPA, DEQ, City of John Day, and the START contractor will continue with air monitoring and mitigation of TVOCs-impacted residences/businesses, and drill rig/other source investigation activities.

2.2.1.1 Planned Response Activities

1. Continue air monitoring and interim mitigation of impacted residences/businesses.
2. Continue drill rig operations to identify extent of contamination and potential sources.
3. Continue use of the HAPSITE GC/MS to characterize vapor intrusion pathways and specific VOCs.
4. Continue monitoring/assessment of sewer manholes and other utility corridors as migration pathways.
5. Conduct a second round of air sampling with Summa canisters in impacted residences to confirm air monitoring efforts, evaluate mitigation efficiency, and collect additional data for health/exposure evaluations.
6. Collect product samples from potential sources/PRPs for forensic analysis to determine if contamination in environment and buildings is related to those sources.
7. Continue identifying irrigation wells that can be accessed so that grab groundwater samples can be collected.
8. ERT will be evaluating and proposing potential short- and long-term mitigation options and installation timeline for EPA/DEQ/John Day consideration in addressing this release.
9. CIC Kay Morrison will continue addressing public concerns, engaging with neighbors/residents while accompanying the field teams, distributing site fact sheets, and providing radio and newspaper interviews.

2.2.2 Issues

Ongoing release and high levels of TVOCs to residences, businesses, and the environment from subsurface and/or groundwater.

The potential sources of contamination and the Responsible Parties have not been identified as of yet.

Potential public health threat and surface water.

2.3 Logistics Section

Logistical support and Command Post provided by City of John Day as well as many private citizens in the community.

2.4 Finance Section

2.5 Other Command Staff

2.5.1 Safety Officer

EPA
EPA START Contractor

2.5.2 Liaison Officer

Judy Smith and Kay Morrison, EPA CIC and Public Information Officer

2.5.3 Information Officer

Judy Smith and Kay Morrison, EPA CIC and Public Information Officer

3. Participating Entities

3.1 Unified Command

City of John Day, Oregon
Oregon Department of Environmental Quality
U.S. EPA Region 10

3.2 Cooperating Agencies

Oregon State Public Health Authority
Grant County Health Department

4. Personnel On Site

EPA On-Scene Coordinator
EPA Community Involvement Coordinator/Public Information Officer
EPA Superfund Technical Assessment and Response Team (6-7)
EPA Environmental Response Team Hydrogeologist

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.